AKIRA

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Air Conditioner

Service Manual

Большая библиотека технической документации
http://splitoff.ru/tehn-doc.html
каталоги, инструкции, сервисные мануалы, схемы.

MODEL:
AC-S13CEGL1

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

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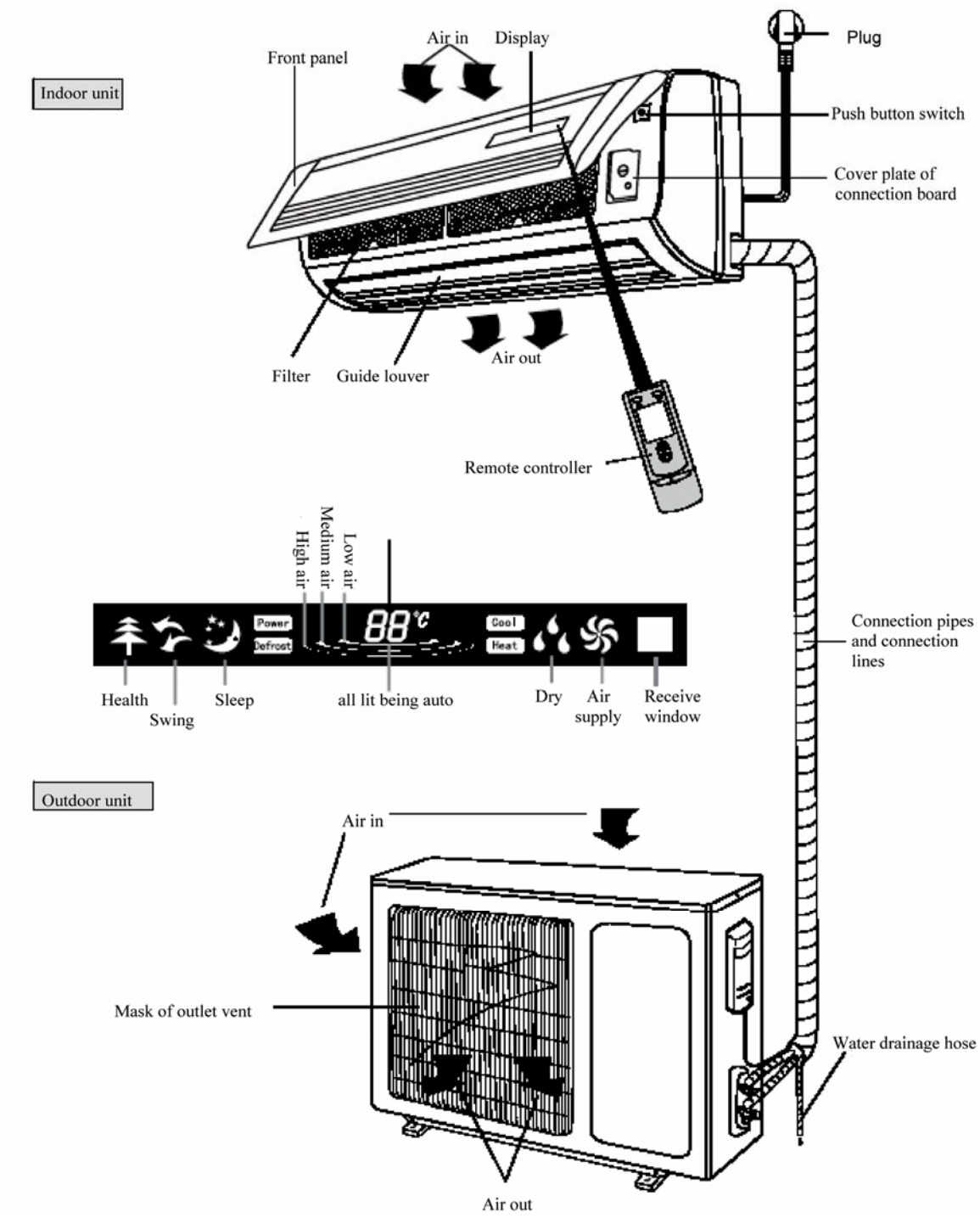
Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

TECHNICAL SPECIFICATION

Content		AC-S13CEGL1
Function		Cooling
Power supply		1Ph 220-240V- 50Hz
Capacity (W)		3500
Rated input power (W)		1050
Rated current (A)		4.87
Dehumidifying volume (L/h)		1.6
C.O.P/ EER (W/W)		3.33
Indoor side	Fan speed (r/min)(H/M/L)	1090/1010/920
	Output power (W)	8
	Fan type-piece	Cross flow fan-1
	Diameter-length(mm)	Φ 92x616
	Evaporator	Hydrophilic aluminum foil
	Pipe diameter	Φ 7
	Row-fin distance (mm)	2-1.4
	Working area (m^2)	0.18
	Guide air motor	MP24GA
	Motor power (W)	2
	Control method/Fuse (A)	Remote contoller/3.15
	Running capacity (μF)	1
	Noise dB (A)	35
	Outline dimensions (W/D/H)(mm)	830X285X189
	Package dimensions (W/D/H)(mm)	875X378X266
	Net weight/Gross weight (kg)	11/14
Outdoor unit	Rated power (A)	1020
	Rated current (A)	4.73
	Throttling method	Capillary
	Compressor type	Rotary
	Starting method	Capacitor starting
	Working temperature	T1 (18~43 °C)
	Condenser	Love water film aluminum film
	Pipe diameter	Φ9.52
	Row No.-fin distance (mm)	2-1.4
	Working area (m^2)	0.33
	Fan motor power (W)/speed (rpm)	48/900
	Fan type-piece	Axial flow fan-1
	Fan blade diameter (mm)	Φ400
	Defrost method auto defrost	-
	Noise dB (A)	54
	Outline dimensions (W/D/H)(mm)	840X540X320
	Package dimensions (W/D/H)(mm)	878X600X360
	Net weight/Gross weight (kg)	40
	Refrigerant/refrigerant filling (kg)	R22/1200

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

PARTS NAME



Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

DISASSEMBLY PROCEDURES OF INDOOR UNIT

Disassemble the front panel.
Pull the panel open. Firstly, unscrew the screw fixing the top cover of the electric box and remove the top cover. Then, pull away the connection terminal. Pull the panel outward with force along the groove fixing the panel of the panel body to remove the as shown in Fig A.

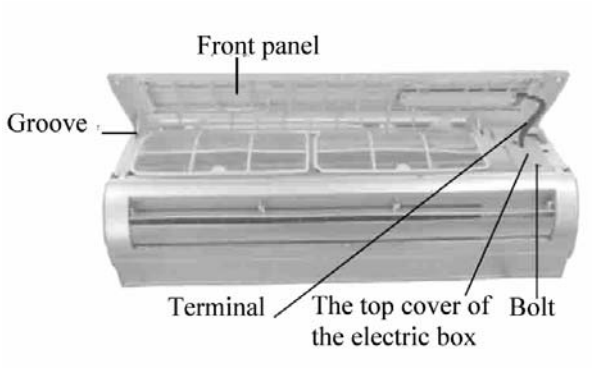


Fig A.

Disassemble filter
Push the filter inward and then upward to remove the filter as shown in Fig A-1

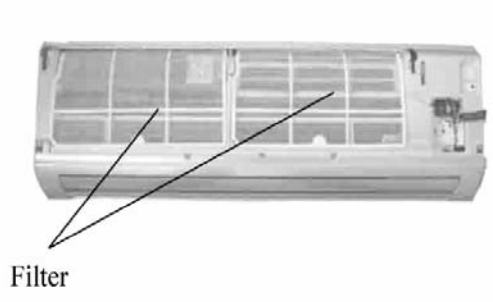


Fig A-1

Disassemble the guide louver
Bend the guide louver so that the movable lock of guide louver is released to remove the guide louver as shown in Fig A-2

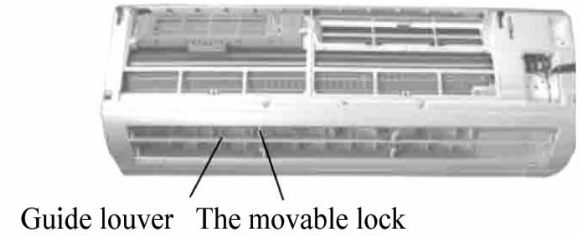


Fig A-2

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble the panel board
Open the 3 screw covers at the panel board and screw off 5 screws. Pull out the movable latch at the panel board with hand and then pull it backwards to disassemble the panel board as shown in Fig A-3

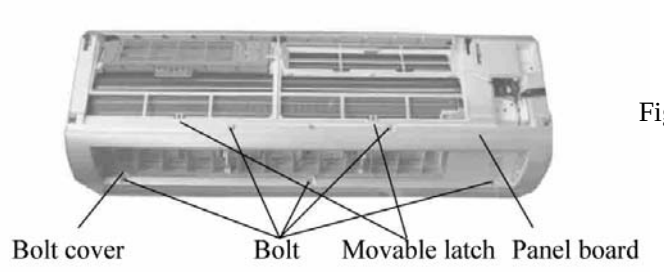


Fig A-3

Disassemble the water tray
Screw off the fixing screws fixing the water tray with a screwdriver, and pull out the terminal board of the step motor. Pull upwards the water tray. Remove the water tray as shown in Fig A-4

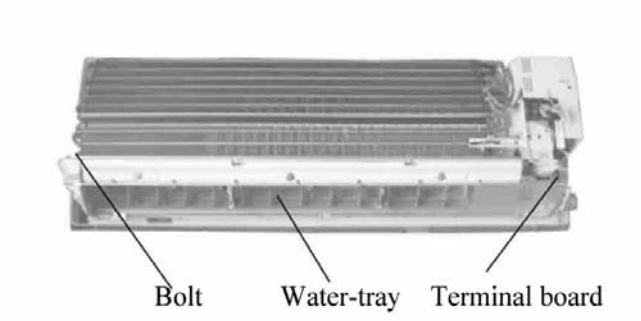


Fig A-4

Disassemble electric box
Open three movable latches with hand and then pull them upward to remove the cover of electric box as shown in Fig A-5

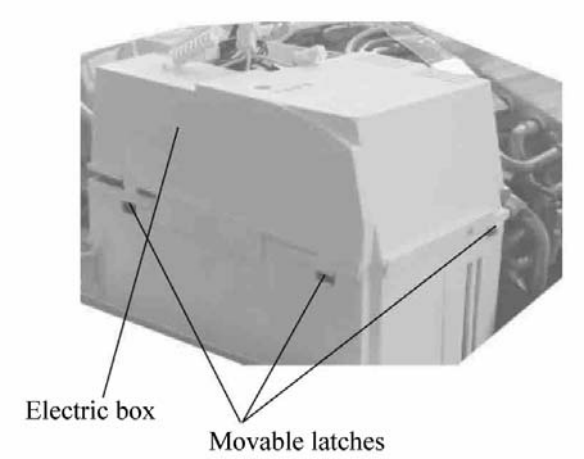


Fig A-5

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble electric box

Remove the grounding wire of the evaporator, and remove the temperature senor for the pipe. Remove the connection lines for the indoor motor. Screw off the screws fixing the electric box with a screwdriver. Remove the electric box as shown in Fid A-6

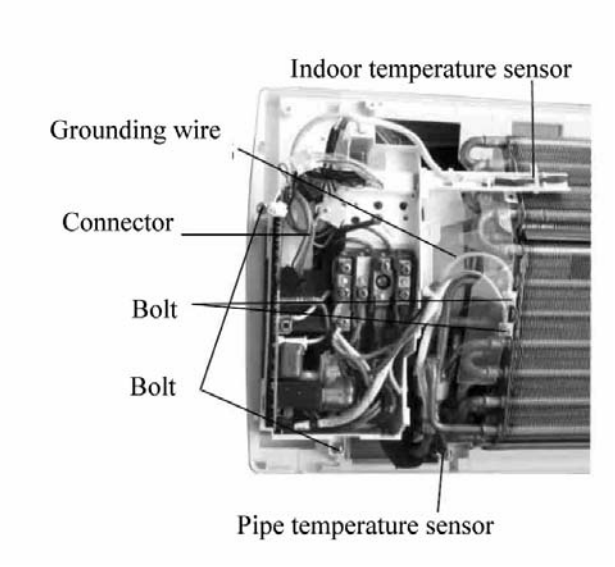


Fig A-6

Disassemble evaporator

The lower rear clamp plate can be removed by just screwing off one screw with a screwdriver. Screw off two screws at both left/right sides of the evaporator and take out the evaporator with hand, so that the sideboard catch of the evaporator is disengaged from the groove. Remove the evaporator carefully and take care to protect the connection pipe as shown in Fig A-7, A-8, A-9:

Fig A-7

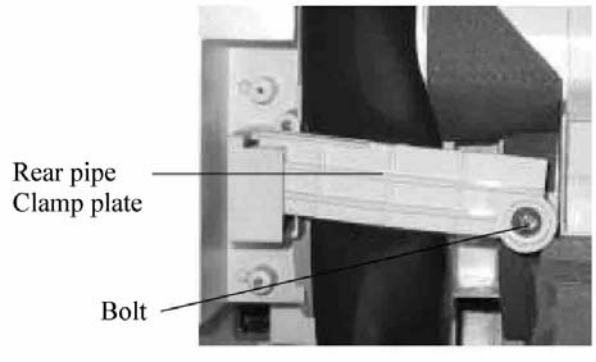
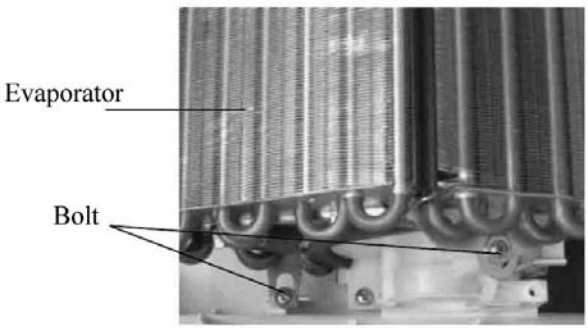


Fig A-8



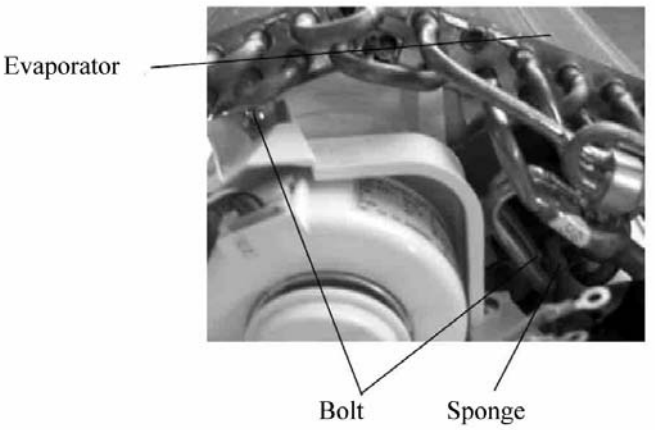


Fig A-9

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble motor
Screw off the two screws fixing the motor pressure plate with a screwdriver and remove the pressure plate. Screw off the three fixing screws at the axle sleeve and remove the motor as shown in Fig A-10, A-11.

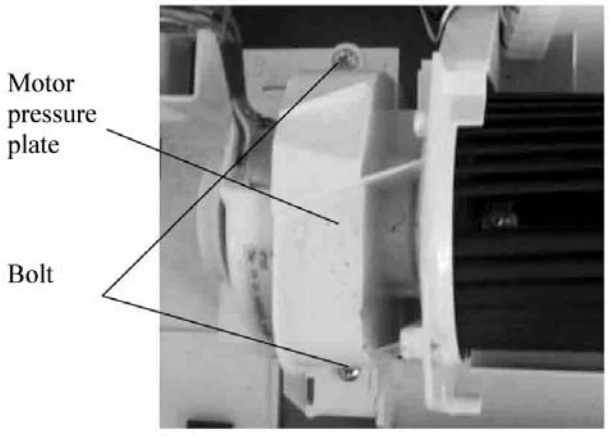


Fig A-10

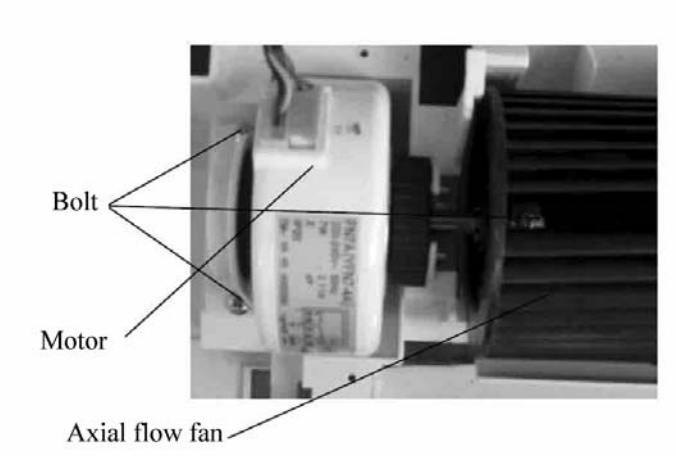


Fig A-11

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble cross flow fan

Screw off one screw fixing the bearing rubber gasket with a screwdriver and remove the bearing rubber gasket. In this case, the cross flow fan can be removed as shown in Fig A-12.

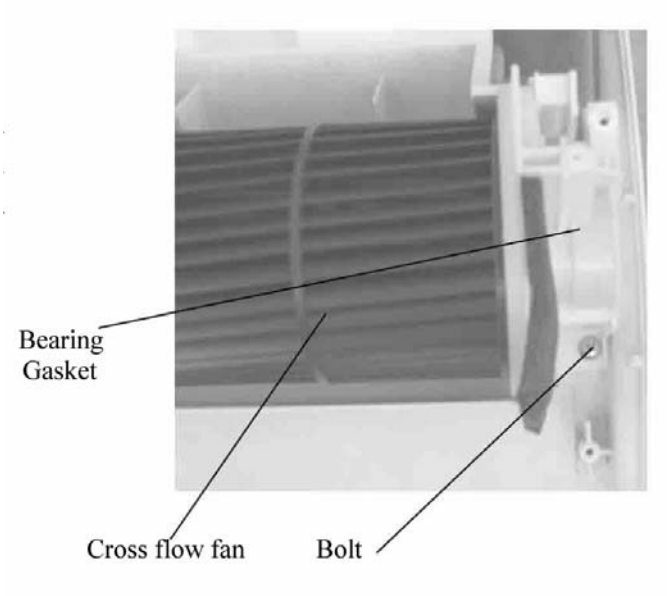


Fig A-12

Auxiliary electric heater

(Note: only existing in cooling/heating units)

Screw off 2 screws fixing the auxiliary electric heater with a screwdriver as shown in Fig A-13

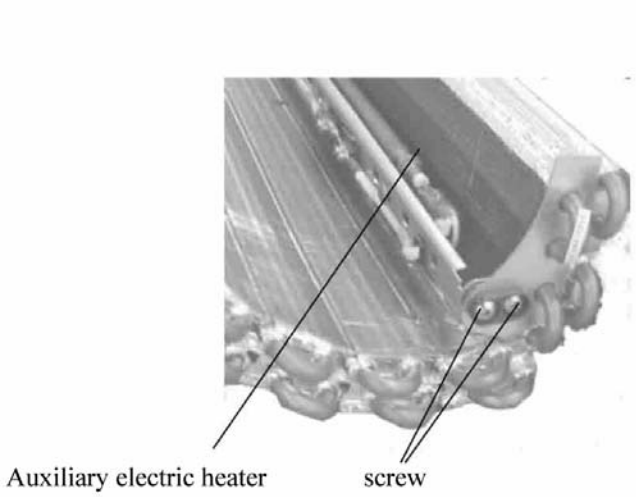


Fig A-13

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

DISASSEMBLE PROCEDURES OF OUTDOOR UNIT

Disassemble the top cover
Screw off one screw fixing the handle with a screwdriver and remove the handle after pushing downward with force.
Screw off three screws around the top cover and pull upward to remove the top cover as shown in Fig B

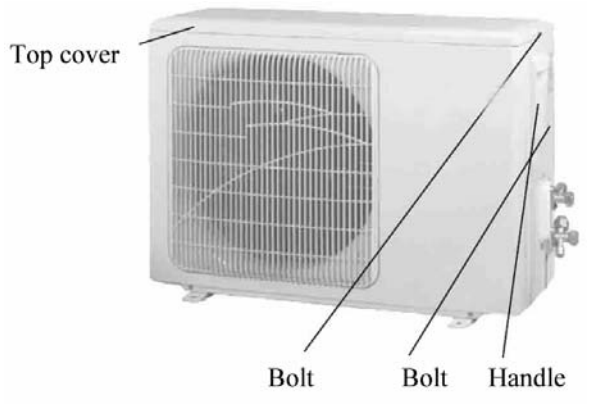


Fig B

Remove the net cover
Screw off 4 taping screws at the rear sideboard, and the valve frame bottom plate and condenser sideboard. Remove the net cover as shown in Fig B-1

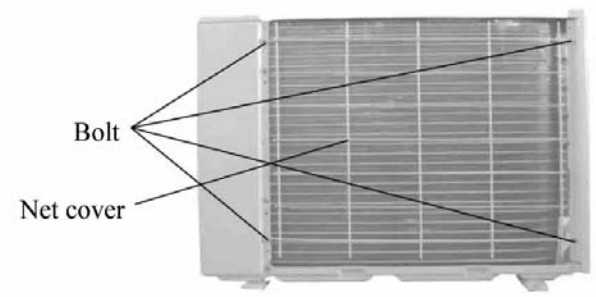


Fig B-1

Disassemble panel assembly
Screw off 5 screws at the rear sideboard and the valve frame bottom plate and the condenser sideboard. Remove the front panel assemble as shown in Fig B-2

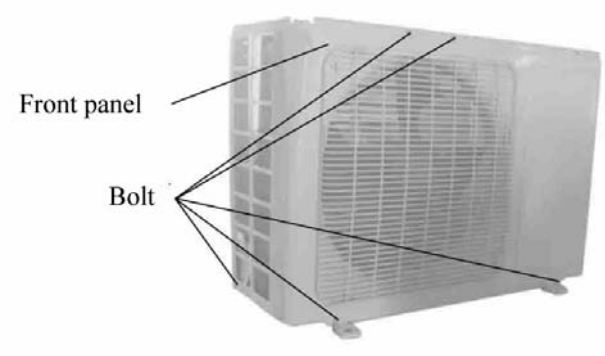


Fig B-2

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble electric device installation board
Screw off the 3 screws fixing the electric device installation board, and pull out the inserting contacts for leads of compressor and fan motor, and remove the electric device installation board as shown in Fig B-3.

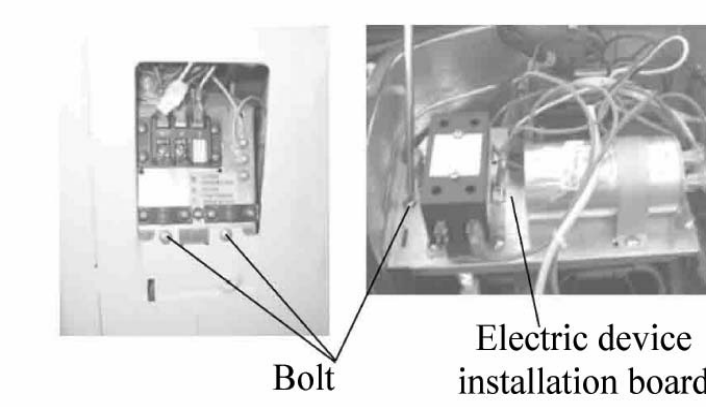


Fig B-3

Disassemble right side plate assembly
Screw off the 5 screws at the rear side plate to remove the right side plate assembly as shown in Fig B-4.

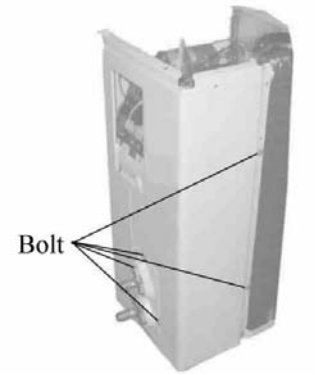


Fig B-4

Disassemble right side plate assembly
Screw off the 5 screws at the rear side plate to remove the right side plate assembly as shown in Fig B-5.

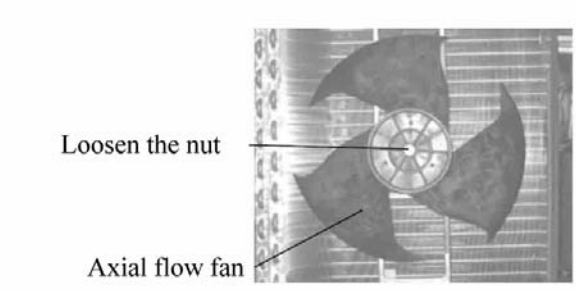


Fig B-5

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble motor and motor support
Screw off the 4 taping screws fixing the motor and remove the motor. Screw out the 2 taping screws and remove the motor support by pulling upwards as shown in Fig B-6

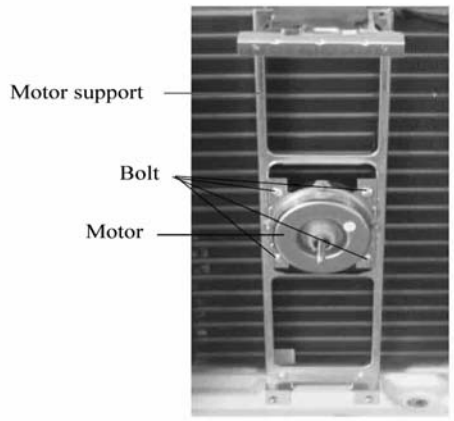


Fig B-6

Disassemble 4-way valve(Only existing in cooling /heating unit)
Screw off the fixing nuts for the fixing the solenoids of 4-way valve and remove the solenoid. Wrap the 4-way valve with wet gauze and solder off the 4 soldering points of 4-way valve, remove the 4-way valve. It is recommended to solder as quickly as possible and the cotton gauze should always be wet. Make sure not to burn the leads of compressor as shown in Fig B-7.
(Remarks: prior to disassembling any pipe component or compressor, it should be sure that no cooling refrigerant left inside any more.)

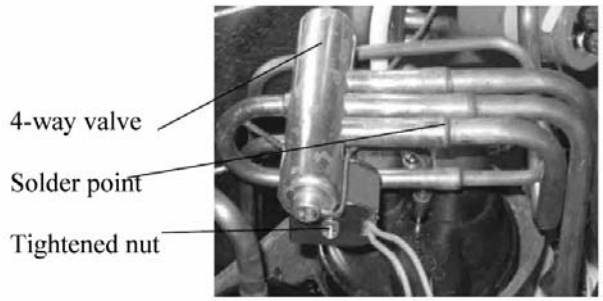


Fig B-7

Disassemble liquid divider assembly
Solder off the soldering points connecting the liquid divider assembly and other pipes as shown in Fig B-8.

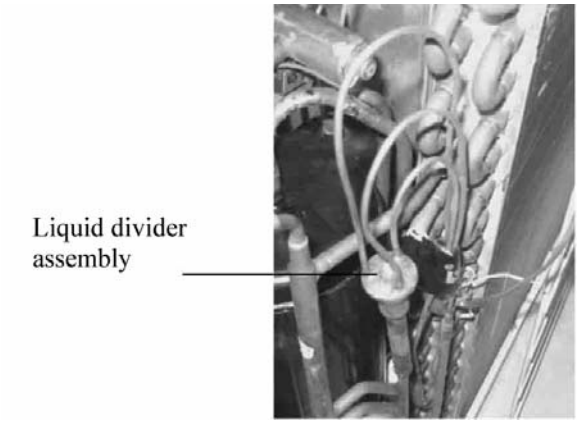


Fig B-8

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

Disassemble big and small valves
Screw off the 2 screw bolts fixing the big valve and solder off the soldering point connecting the big valve and the gas returning pipe. Remove the big valve.
(Remarks: It is recommended to wrap the big valve with wet gauze completely when soldering off the soldering points to prevent the valve body from being damaged by high temperature).
Screw off the 2 screwed bolts fixing the small valve, and solder off the soldering point connecting the small valve and the cross type pipe. Remove the small valve as shown in Fig B-9.

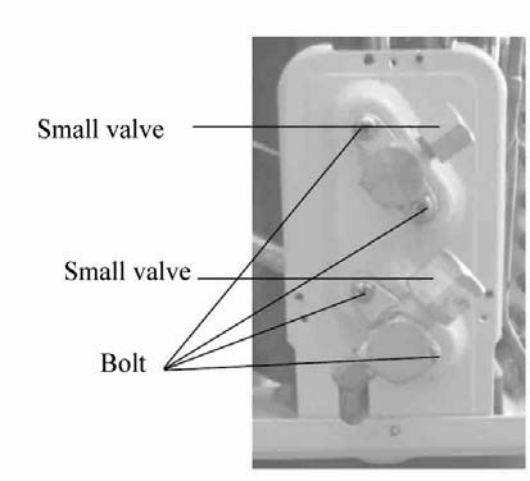


Fig B-9

Disassemble the compressor
Screw off the 3 washer nuts at the bottom legs of the compressor (Remarks: requiring drainage of cooling refrigerant first). Solder off all the soldering points of sucking/discharging pipes for the compressor, and remove carefully the piping. Remove the compressor as shown on Fig B-10.

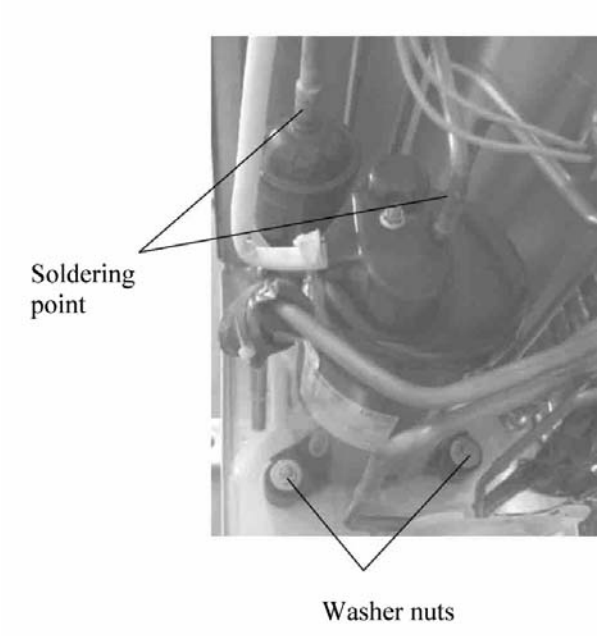


Fig B-10

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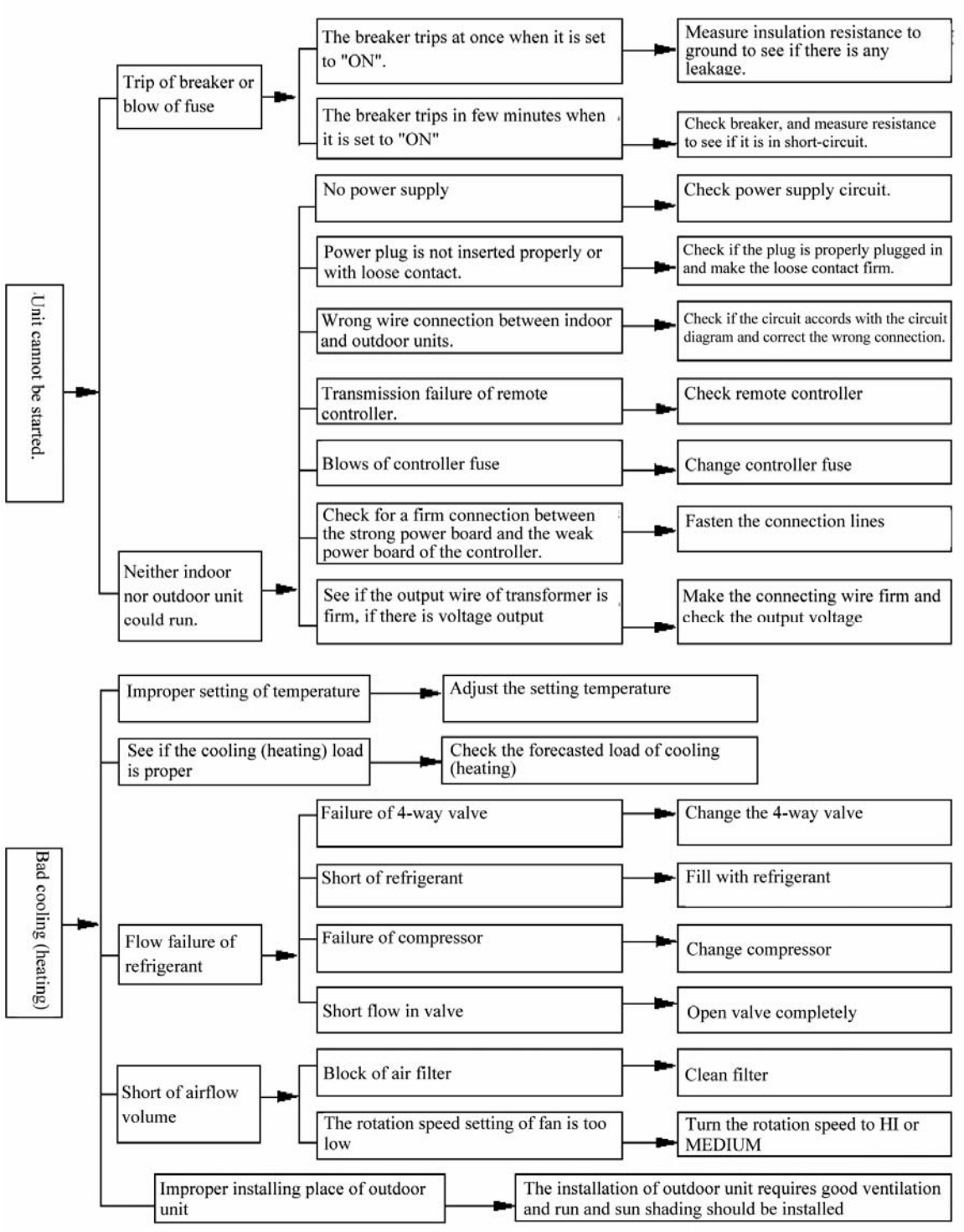
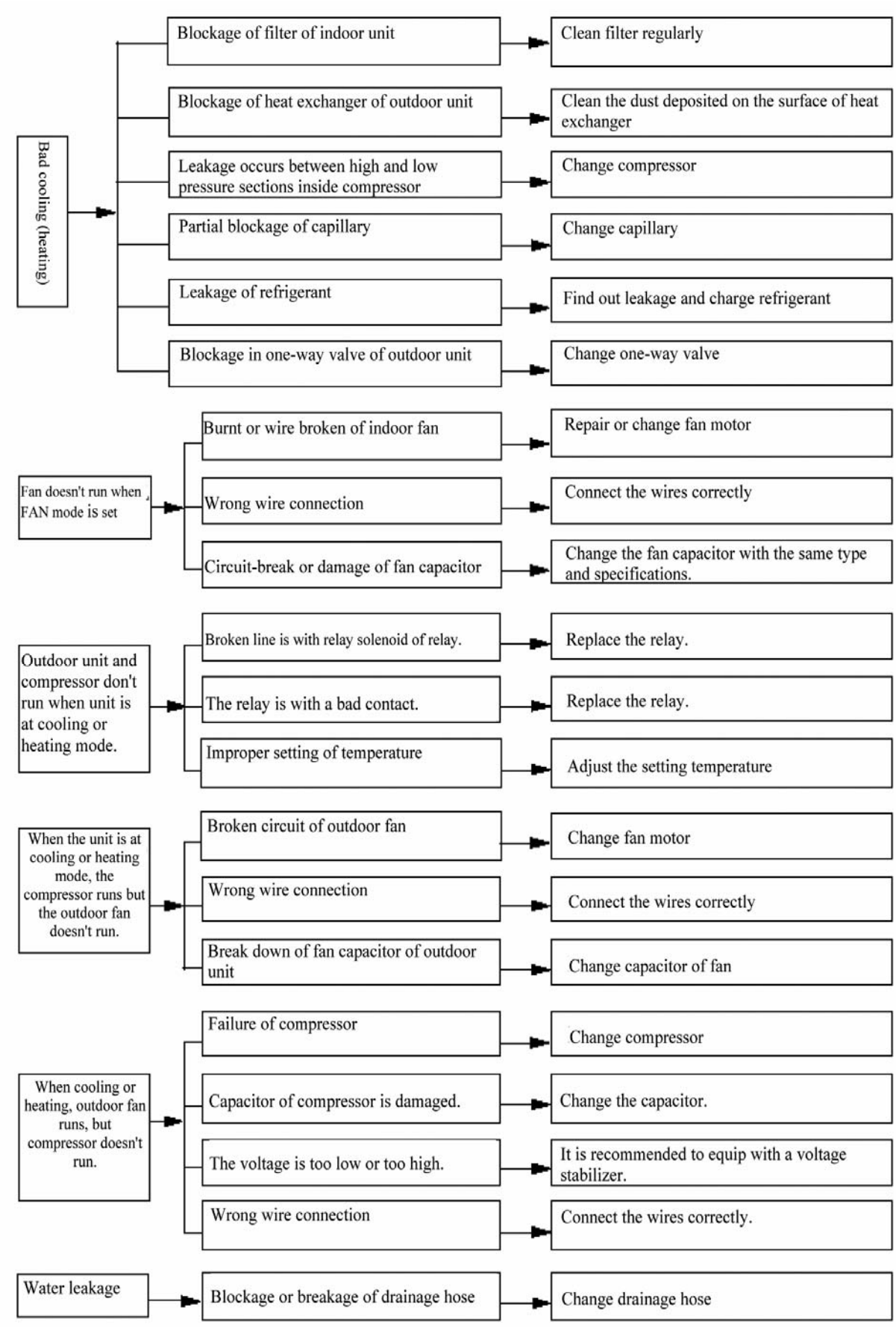
FAILURE AND ANALYSIS



Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html



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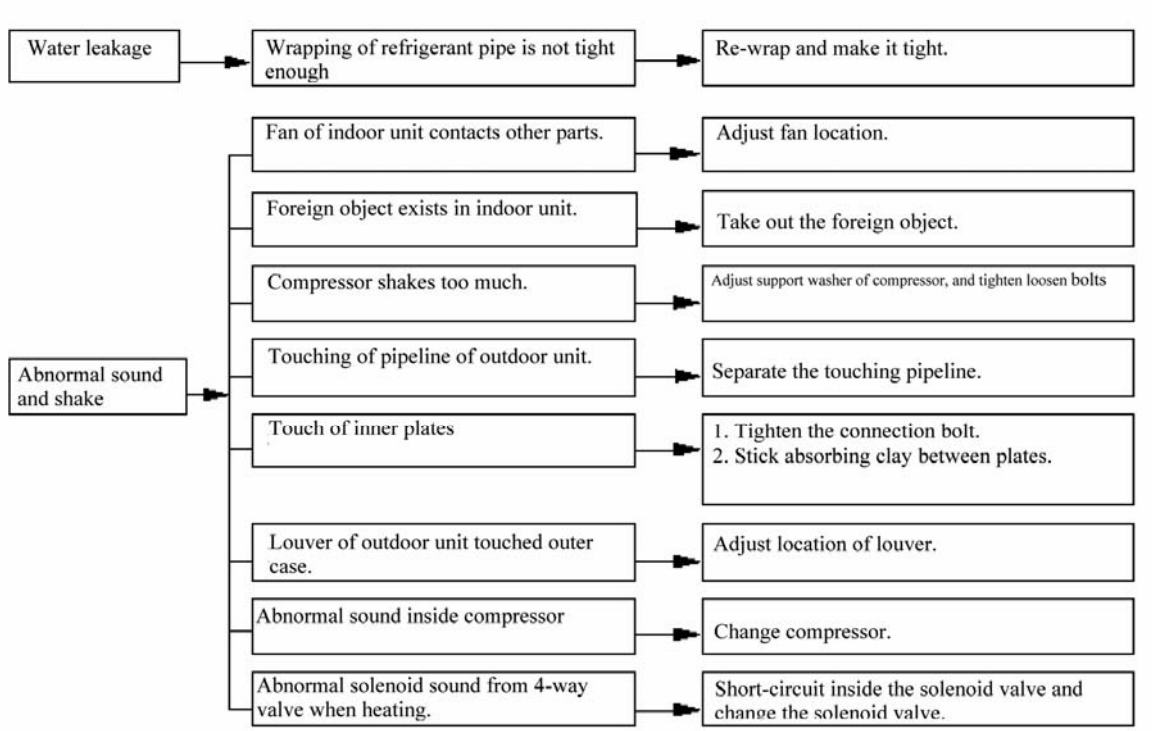

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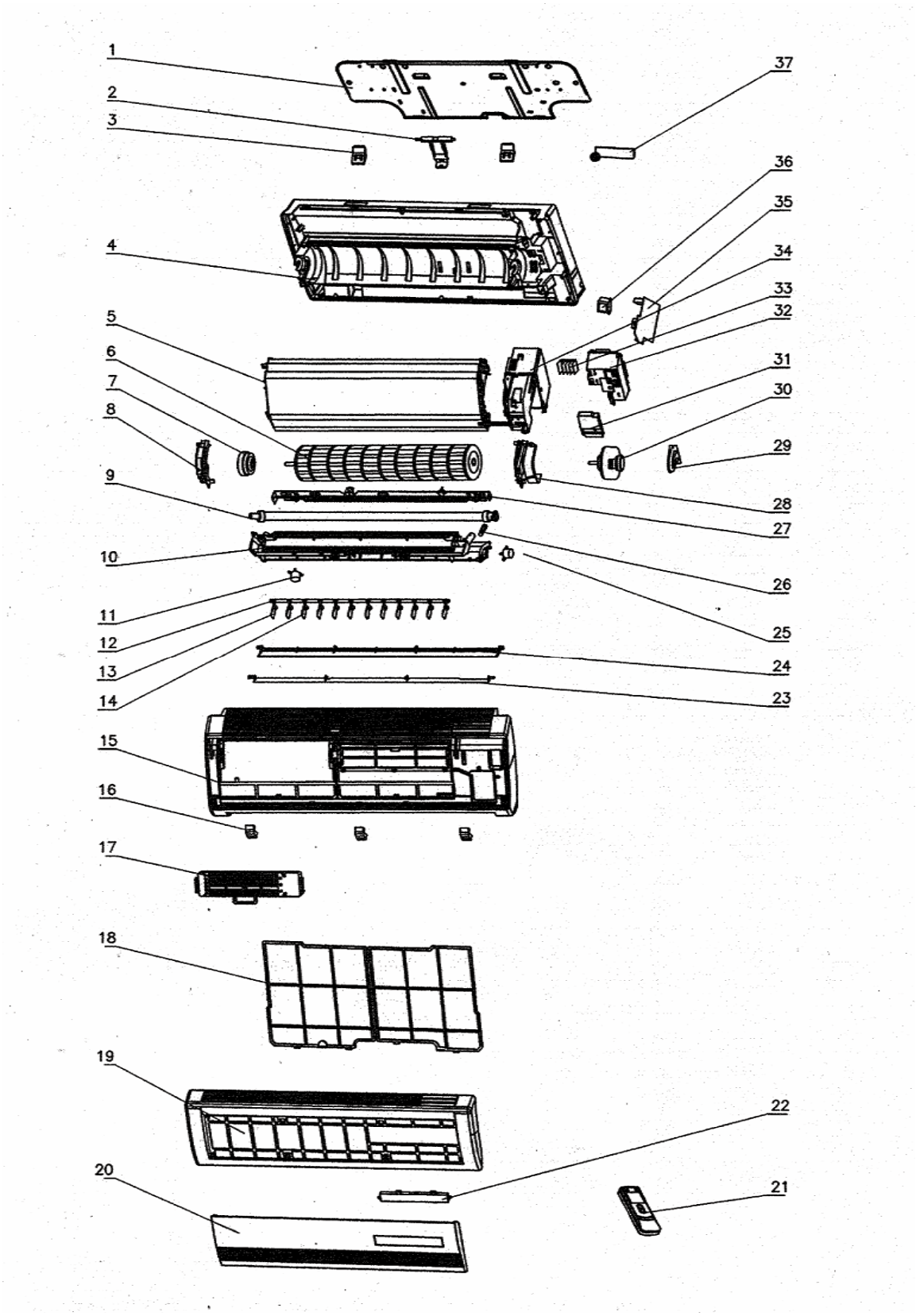
EXPLODED VIEW OF INDOOR UNIT



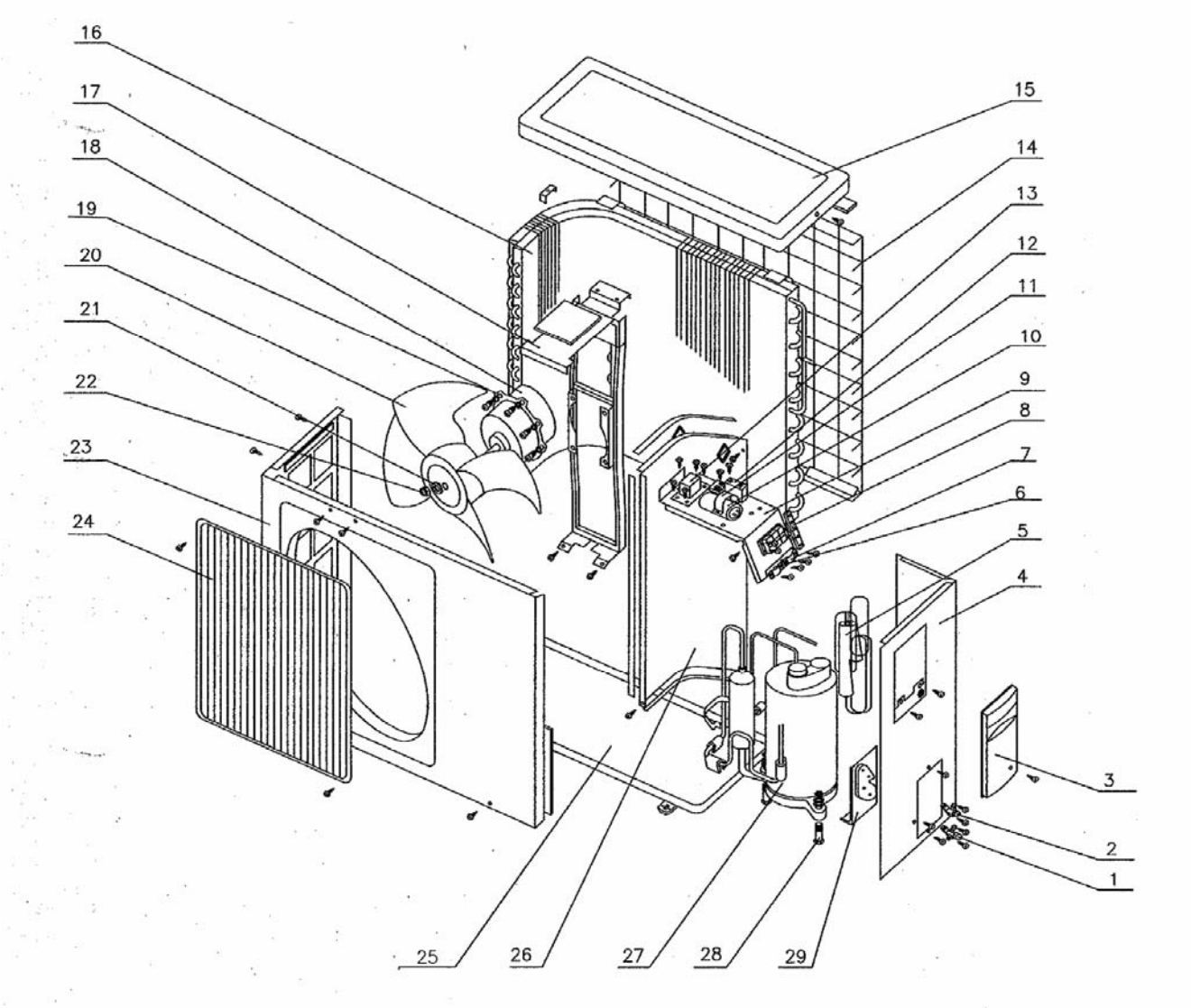
Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

PART LIST

No.	Part Description	Part No	Qty
1	Wall-Mounting Frame	01252384	1
2	Pipe Clamp	26112425	1
3	Frame Hook	26272421	1
4	Rear Case	22202037	1
5	Evaporator Ass'y	01032082	1
6	Cross Flow Fan	10352405	1
7	Ring of Bearing	76712015	1
8	Left Motor Clamp	261124281	1
9	Drain Pipe	05232411	1
10	Water Tray	20182034	1
11	Motor MP24CA	15212106	1
12	Swing link	105824393	1
13	Swing Louver	10512046	2
14	Swing Louver	10512047	10
15	Front Case	20002301	1
16	Screw Cap	242524408	1
17	Static Dust Catcher	11012201	1
18	Filter	111224442	2
19	Front Case	20002301	1
20	Little Front Panel 1	20002305	1
21	Remote Control Y512SB	30515037	1
22	Display Board 5253F	305452081	1
23	Guide Louver (up)	10512050	1
24	Guide Louver (down)	10512052	1
25	Stepping Motor MP24GA	15212102	1
26	Drain Pan Ass'y Stuff	76712005	1
27	Electric Heater 600W		
28	Right Motor Clamp	26112429	1
29	Motor Bearing Holder	26152423	1
30	Motor FN8H	15012051	1
31	Electric Box Cover	20122009	1
32	Covering Plate	20102123	1
33	Terminal Board T4A3A	42011240	1
34	Electric Box	20102108	1
35	Main PCB 5251FJ	30035444	1
36	Transformer 57X25C	43110237	1
37	Pipe Clamp	24242004	1

Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

EXPLODED VIEW OF OUTDOOR UNIT



Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

ART LIST

			Qty

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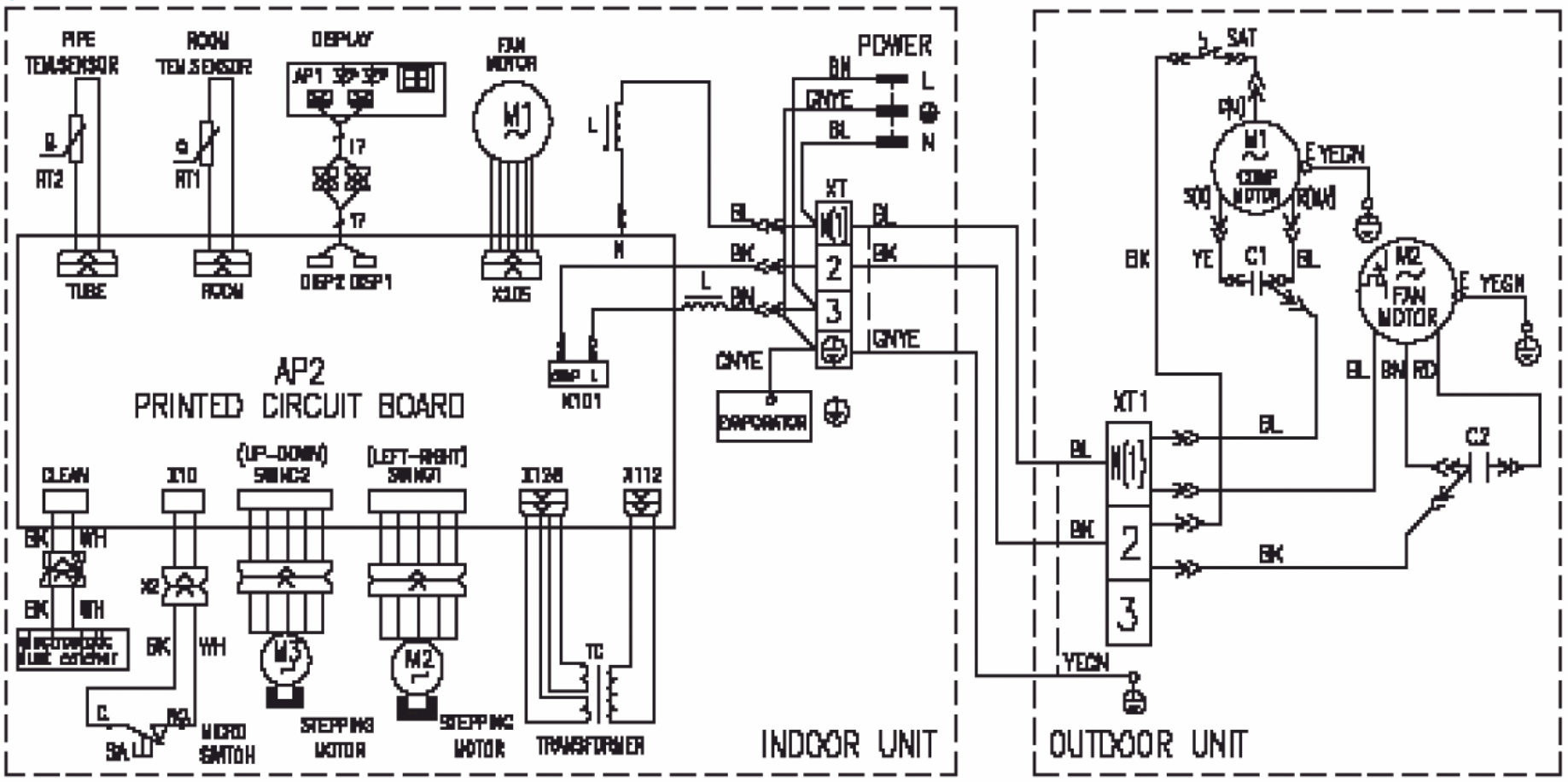
CIRCUIT DIAGRAM



Все каталоги и инструкции здесь: http://splitoff.ru/tehn-doc.html

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http://splitoff.ru/tehn-doc.html
каталоги, инструкции, сервисные мануалы, схемы.